

Figure 1

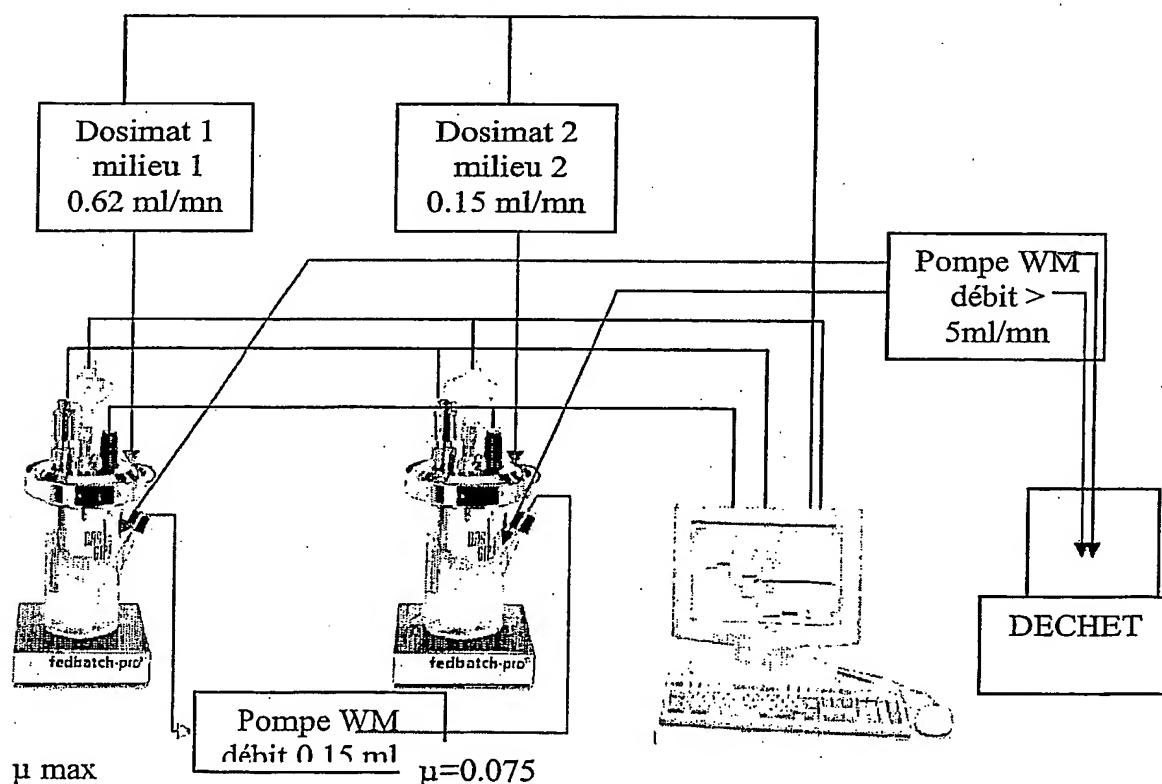
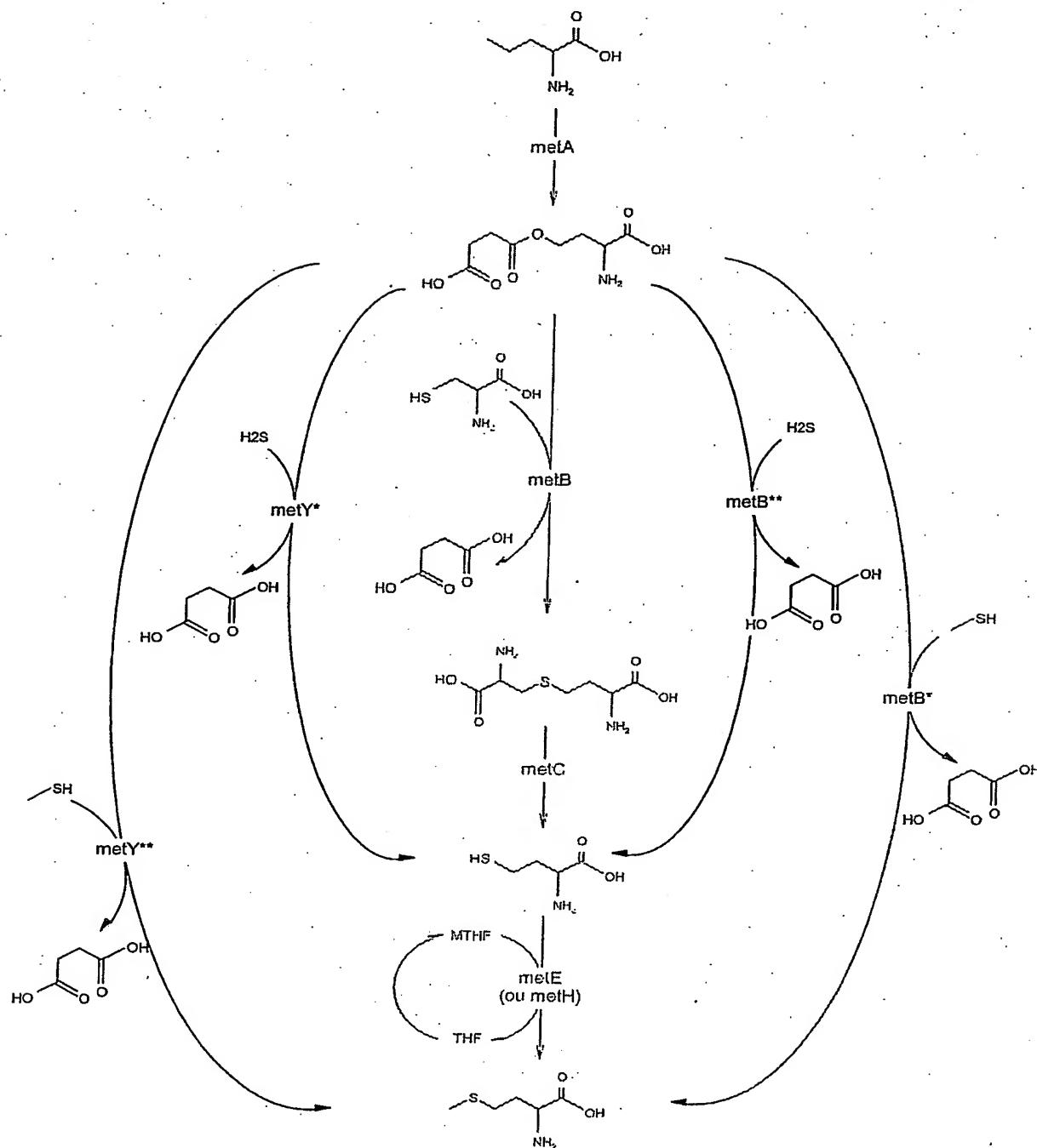


Figure 3

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**Figure 2**

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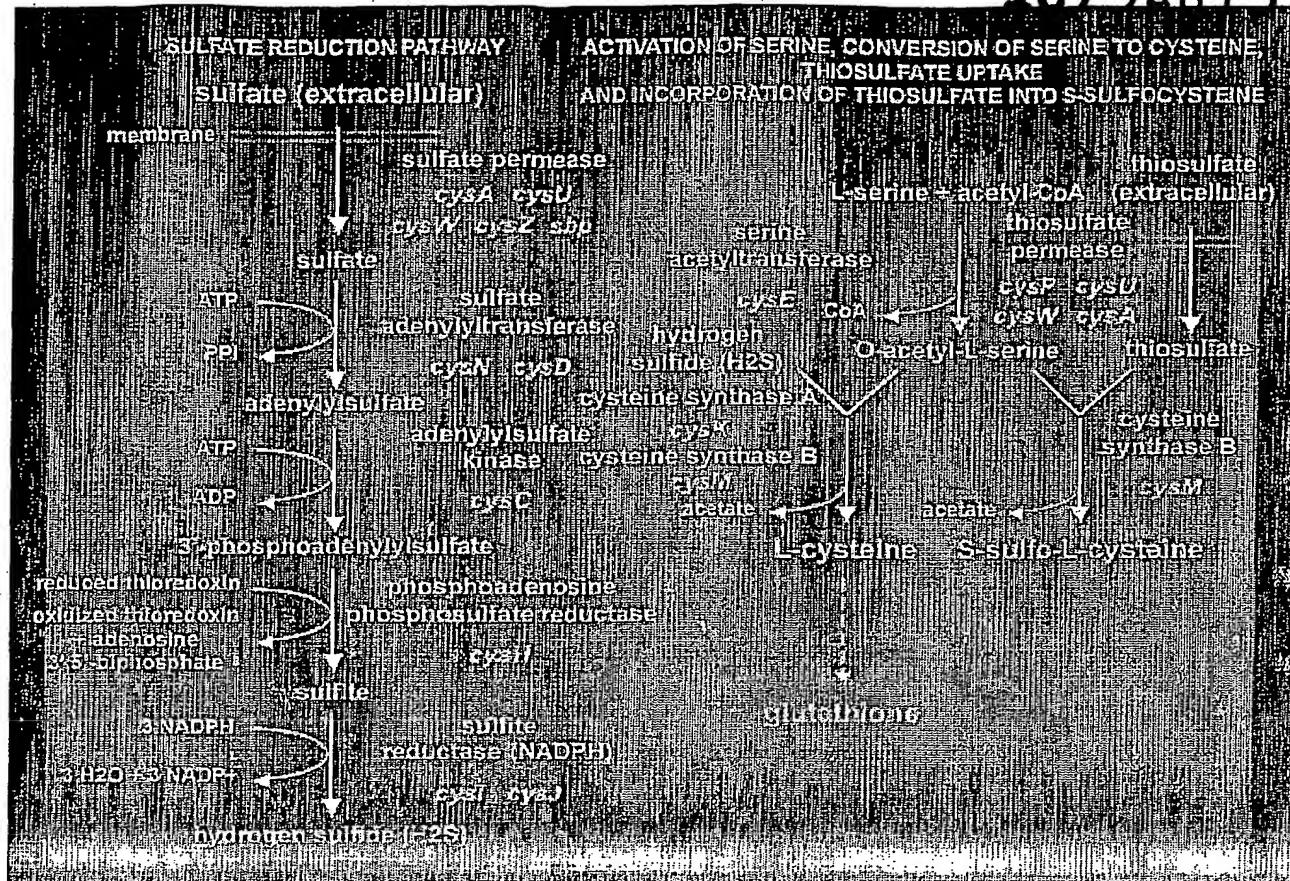


Figure 4

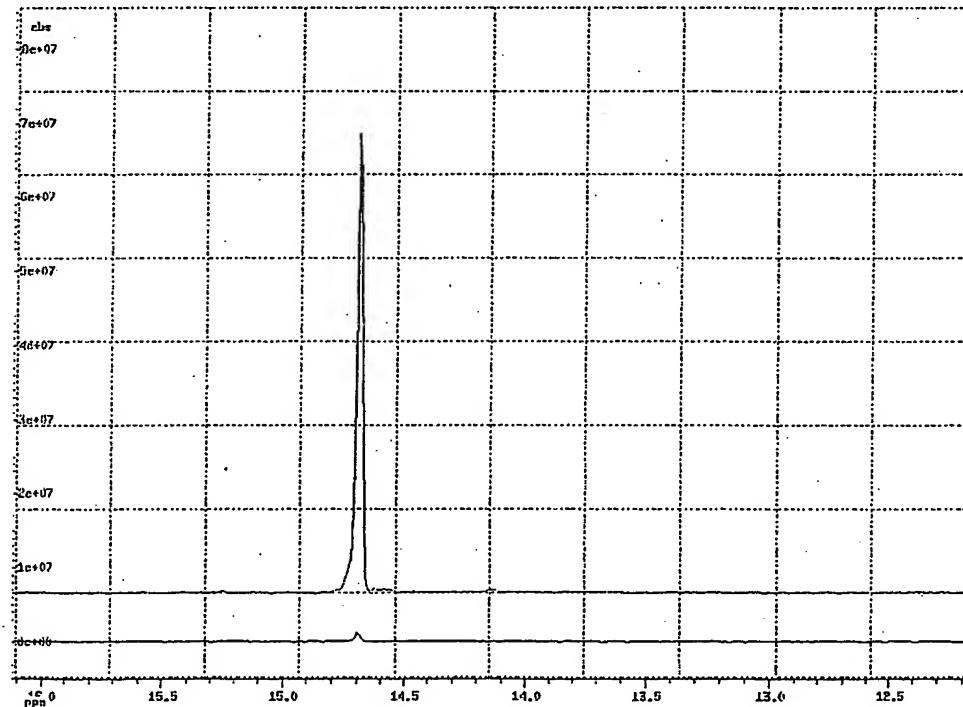
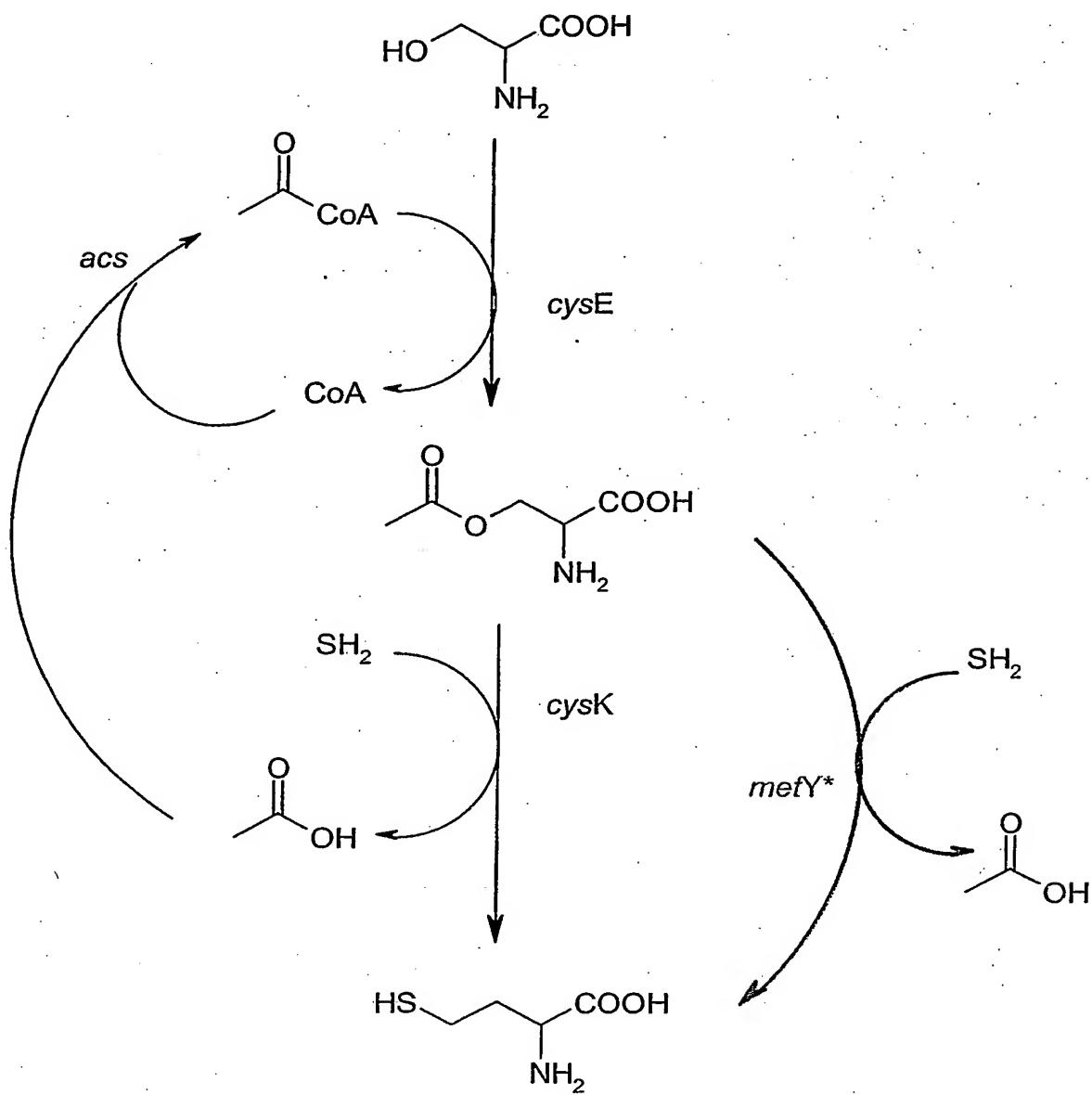


Figure 6

**Figure 5**

100

Q9ZMW7	NP_373671	NP_46807	NP_30944	NP_696324	NP_029646	NP_638204	NP_719586	NP_418374	NP_457953	NPAC61028	NPB_126586	NPC_343729	NPNE_359021	NPNE_358970	NPBP_786043	NPBP_601979:	EEA3D0199	Consensus
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MLFPTPTIAS RCVDFTIISRA PADUOSNIEV VNLVLDMSDP EARAELPLCP SISAVIMQD GFPFAKQYWQ HSGDGVSSRR AEFFCHGLFKD GLLRPDTELR

Figure 7

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Figure 7 (Suite)

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Q9ZMW7 LIQORGKIKLGLRMEAHQKNA LCYAEOFLEKH PK--VERVY PGLPHTPNHE LAKAQMG-- FSGMSFTLK -NDSEAVAFV ESIKLFILGE SUGGESVTC
 NP_373671 LIYRGKIKLGLRMEQTRSV IELIKMLOAH PA--VQQVFH PSTEISHLNHD VIMAQADG-- HTGVIAFEVK -NTESAROLI KAYSYTTLAE SIGAVESLIS
 P46807 LTMRGLKLTV LRMORHINENA ITVAEFLAGH PS--VSANLY PGLPSHPGHE VAARQMG-- FGGMSLNR AGRLAQADLC ARIYVFTLAE SIGGVESLIS
 CAD30944 LDVRGKIKLVRMDRISSENNA TKVADMLSRH AR--VTSVLY PGPEPHPGHE VAAOKONKA-- FGGMSERVE GGEQADEV C NRAMVFTLGE SIGGVESLIS
 NP_696324 LDIRGLKLTD LRVRHSSENNA LKVAWLESQ PSDVQSHPGHE TAAROMGG-- FGG3IVSVOA AGAEAKHVF DFTQFTLAE SIGGVESLIS
 AA029646 LTURGKIKLTD ABLRVGENA QMLLALEGH GV--VREHY PGFLASHPGHV LAGROQHG-- FGAMLSEFQ GGEAATRAFU SCRYFTLAE SIGGVESLIS
 NP_638204 LTURGKIKLTD ABLRVGENA DATAVLLENH AA--VNQVYF PGFLASHPGHA JAAROQKG-- FGAMISFEI GGEAATRAFU DGJXFTLAE SIGGVESLIS
 NP_719586 QTLRGKIKLTA VRIREHORNNA ORIVELVNSN PV--VSRVYY PGADHPGHA JAAKQKG-- FGAMISFEI GGEAATRAFL DALSFVAE SIGGVESLIS
 NP_418374 LLURGKIKLTV PRMELAORNNA QALVKYLOTO PL--VRLYLYH PSLPEPNOGHE TAAROQKG-- FGAMISFEI GDEQTIRREL GGLSLFTLAE SIGGVESLIS
 NP_457953 LLURGKIKLTV PRMELAORNNA QALVKYLOTO PL--VRLYLYH PSLPEPNOGHE TAAROQKG-- FGAMISFEI GDEQTIRREL GGLSLFTLAE SIGGVESLIS
 BAC61028 MTLRGKIKLGLARMYTHEESS QRYVNLQOQ AL--VAKLYH PSLPDHPGHE JARKQCG-- FGAMISFEFA GSFEQKVFV KEFLFSLAE SIGGVESLIS
 NP_126586 MLERGMRTLVE RFRERQSENNA MATAFLKDQH PK--VREHY PGKDDPYK VARRLEKKDL YGCVVAFD LG SG-DNALAFL RGKRIFPSP SIGGVESTAT
 NP_343729 LTURGKIKLTK IRMDVIRNA EQAEOFLEKH PK--VUKVYY PGKSHVDY IARYVUKG-- FGGVLSFEVN GGQESALKVM KSURLLIPAO TLGGVNSTIS
 NP_539021 MIGRSLETGLLRMERASDNA RAJAEFLRNH PK--VRLYLYH LPPADERSDI AALEFKQCTG AGSTFSFDIK GGQAAPRFL NALQILKLV SIGGTEAS
 NP_358970 QLURGKIKLTS LRMRERSTANA QEVYFLKDS PA--VKEVLY TGR----- -GGMISPKVA DETR-IPHIL NSKVKSFAE SIGGVESLIT
 NP_786043 LLURGKIKLTP LRLHQOBZNA QELYVTFEAD EH--VERVY SER----- -GGMISFEVLA TGTD-TDTEL RAINVISFA SIGGVESLIT
 NP_601979: LAIRGLYSLA VRLDRAESNA AELSRRLNH PS--VTRVNY PGLPDDPQHE KAVRVLPSG CGNMISFEI ATPERTBIL ESULSHTAT SWGGVEATE
 EA30199 FMERNRSRDFV AIRDYVANA EAIICRVLQDH PL--VKTLYY PRYNDSRANV EAVKPLDQGG YGELLSVILK -GKCKOAVAFY DAET-AKGP SIGGNEFTLS
 Consensus I.IRG1..EL .RM.na ..i...L..h p. V. V.Y Pg1..hp.h. .a..q..g. fggm.sf.1. .g...a..f. ...1..f.lae SIGGVESSI.

501

Q9ZMW7 IPALMTHACI PKAQREAGI RDELVRLSVG IEHEQDILED LDQAFAKIS
 NP_373671 VEALMTHASI PADIRAKEGI TDGLVRLSVG LEDTEDLYDD LKQALDTL
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 CAD30944 HEGRMTHASA AGSALE---V PADLVRLSVG TENADDLID LQQLAG
 NP_696324 VPAAMTHASV AGTTLQ---V PANLVRLSVG TENADDLID LQQLDRI
 AA029646 HPSAMTHAM TPEARAKAGI SDGLRLSVG LEASEDLID LYAGLGRAOA VREECKV
 NP_638204 HPSAMTHAM TPEARAKAGI SDGLRLSVG LEASEDLID LYAGLGRAOA AVSAVARKOV DA
 NP_719586 VPAATMTHAM EPOARFAAGI KDTKLRLSVG LEDADDLIVD IQGLAJAVA CQ
 NP_418374 HAATMTHAGM APEARAAGI SETFLRISTG TEGDEDLID LLENGERAANK G
 NP_557953 HAATMTHAGM SPOARAAGI SETFLRISTG TEGDEDLID LLENGERAANK G
 BAC61028 HPSAMTHAM GEEALAAVG SHOLLRLSVG LEDADDLID LDQAFVKAQ
 NP_126586 YPKVSAAKTL DEEIREBTLGI TDGLIRLRLSVG LEPLDELIED INNALGVVR
 NP_343729 HPAAMTHSGV SLEERKVG1 TDSLRLSVG LEDVNDLIED LDRALSTLY
 NP_539021 HPAAMTHSGV PYDVBVRIGV LESTTRLSIG TEHEDDLID LAQALDAA
 NP_358970 YPTTOTHADI PAEVRSYGL TDDRLRLSIG TEHARDLID LQALEG
 NP_786043 VPAVQTHADL TEEQROSIGI TANLRLSVG LENSADIAAD IFOALIRATK
 NP_601979: PYVLLAHYQ- ELDWAEQYGV PMTLCRVSVG IEDVEDIWE INASIDKVLG
 EA30199 Consensus .pa.mtha.r..g! ...L.RISIG iE...#Li.D 1.qal.....

562

Figure 7 (fin)

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1

NP_785969	MTTINPENY HFETLQVHAG QTV-ETGAR AVPIQFTSY VFKDAQOAAG RFALTDAGNI YTRLTNPPTD VVDKRVAALE
NP_712243	MPRNY KPETLAHGG QSPBPLSLR AVPIQFTSY VFKANTEHAAK LGLOEFGNI YTRLTNPPTD VIEQRIAALE
AARNS8137	N M KLETTLAHTAG FSPIPPTKAV AVPIQFTSY AFDDTOHQAD LFDLKVAGNI YSRINNPTND VIEORMAALE
NP_599886:	MP KYDNNSNADON GFETRSRTHAG OSVDAQTSAR NLPYQSTAF VEDASR, RFALEDQGPV YSRINNPTVE ALERNTIASLE
BAC46370	MDISRPVFFV TVFDETMASE VPMKSPATY RPETRLVHSG TURS-QFGET SEALEFTQGY VNSAEECEA RFKGDPGEI YSRVSNPTIS MPERRMIELE
AA057279	MTQWDWA GRUDSDLEGV GFDTLAVRAG ORHT-PEGEH GDMFMTISSY VRTAADAAM RFAGETPGNV YSRVNTNPTRV SEEERTIAALE
AAA83435:	MTQWDWA GRUDSDLEG AFTDLAVRAG ORHT-PEGEH GEALFTISSY VRTAADAAM RFAGETPGNV YSRVNTNPTRV TEERIAALE
NP_284520.	MSKKL HPOTLARGG KIEOT-EYREH NOQALFTSSF MUNNAQHAAD LFSKKIGFT YTRANPPTA AEFKRIAALE
Consensus	#TRIA.haG C.....D.....S.....W.....P.....Q.....Y.....V.....T.....A.....H.....K.....E.....I.....F.....G.....N.....R.....

	101	HGTAGVTIAT GSAATTAAIL NIACQGDEIV AANTLYGGTY DIFSVTLLKU GITTHFVD-P DEPANFETAI NDHTKALYVE SIGNPGINLV DEAIGKIAH
NP_785969		CGVAAALATAS GQAETTAAIL NIVEAGOEVY ASSILYGGTY NILHYTFPKL GIKVHFVD-P SOPENFRKV NDKTIRAFYA TLGPBKTLN NLEIAKYAH
NP_712243		GGVGALAVAS GMAALTYAIQ TVAEGDNIV SVAKLGGTY NIJIAHTLPRM GIHTRRA-H DOLAALELL DARIKATFCF SIGNPAGNTV DIHALAEAH
AAN68137		GGVHAVAFSS GQAATTAIRNL NILAGGDHV TSPRLYGGTE TFLFLITLNRL GIDVSFVNPF DDPESWQAAV QPNTPKFFGE TFANPQADVL DIPAVAETAH
NP_599886:		GAEAARSATI GMAAATTAIL APLKTDGHVV ASRALFGSCL YIQDILLPRY GIETTUVGD-G LDLDQWORAL RPNTKFFLE SPNTPLDVL DPGLAEAH
BA046370		GAEQAVATAT GMAAATLAIVM SLCSACDHWL VSRSTVGSTI SLEDKYFKRF GIEVDVVP-L AELSGWNAAL KANTKMLFVE SPSPNLAELV DIHALAEAH
AA057279		GAEQAVATAS GMSAATLAIVM SLCSSGDHWL VSRSTVGSTI SLEDKYFKRF GIQVDFPP-L SDAAWEAAC KPTNTKFFVE SPSPNLAELV DIHALAEAH
AA83435:		GAERAVATSI GMSAATLAIVM SLCSSGDHWL VSRSTVGSTI SLEDKYFKRF TDINERKAIV KANTKMLFVE TPSNPLGEVA DIELAELAH
NP_284520.		GAERAVATSI GMSAATQAFF TELQAGDHVY SSRSLSFGTTV GFINNIVTKF GIEVSHVS-P #...W..# SD NP. #...# as .W
Consensus	gaa.ava.at	GI.V.-V.-P. .#...W..# SD NP. #...# as .W

	201	300
NP_785969	DHGIITIVDN TFGTPYLVRP LEHGADVVH SATKFIGGHG TMGGVIVEG GQFDW---RA SG-KYPDFTI PDQYNGCLVF ADIGGA-----	-----AFPTK
NP_712243	DSEVPLTIN TLPSPLVNP IEHGADIVH SLTKFIGGHG TSIGGIIVDS GKFWN---G NG-KFKNTTE PDPSVGLKF WEYGKFPFV CGVNAYLIR	-----AFPTK
PAN68137	RHGVLIVDN TVATPVLCRP FEHGADIVH SLTKIGGHG TSIGGIVIDS GKFPW---AE NKEERFALANT PDPSVGYU TYAEGP-----	-----AFPTK
NP_599886:	RNSVPLTIN TIATPLAVRP LEHGADVVH SATKFIGGHG TSIGGIVIDS GKFDWVKEKD GRPVFPYFTV PDAAYIGLUKY ADIGAP-----	-----AFPTK
BAC46370	KGGARLVVDN VFAPIIWQSP IALGADVVY SATKHIDCQG RCGGIIILSS E-----	-----AFGLK
AAO057279	AKGAMLIVDN CFCIBALQOP LLLGADIVH SATKFIGDQG RCMGGIVVAGR S-----	-----AFVAF
AAA83435:	AKGALLAVDN CFCIBALQOP LKLGADIVH SATKFIGDQG RCMGGIVVAGR G-----	-----EQKKE
NP_284520.	GIGALLIVDN SLLSEVGVSQP LKHGADISYS SATKAIDGKG RWMGGVLAGS E-----	-----EQMKA
Consensus	...ga.!1DN ...tp.1..P 1.hGADIVh satk.iDGHG r...GG!...g.....	af.....

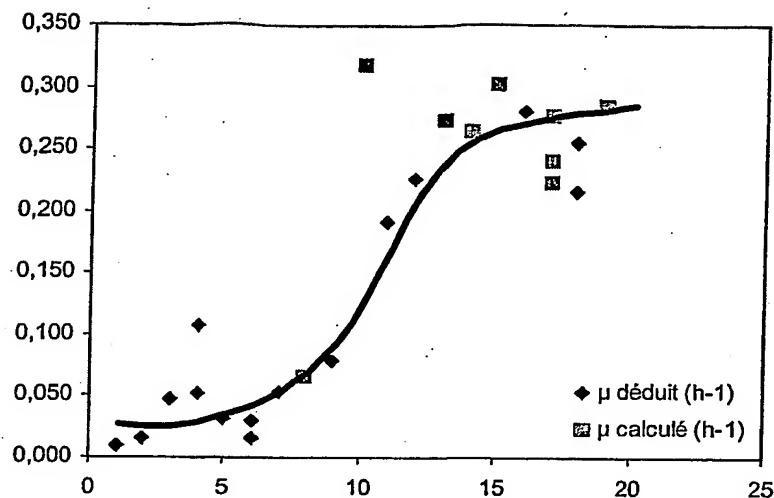
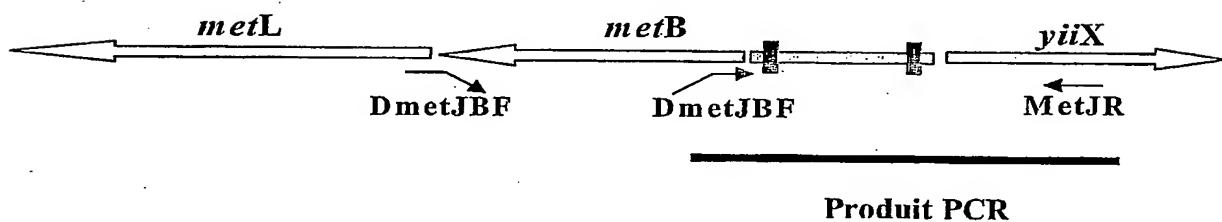
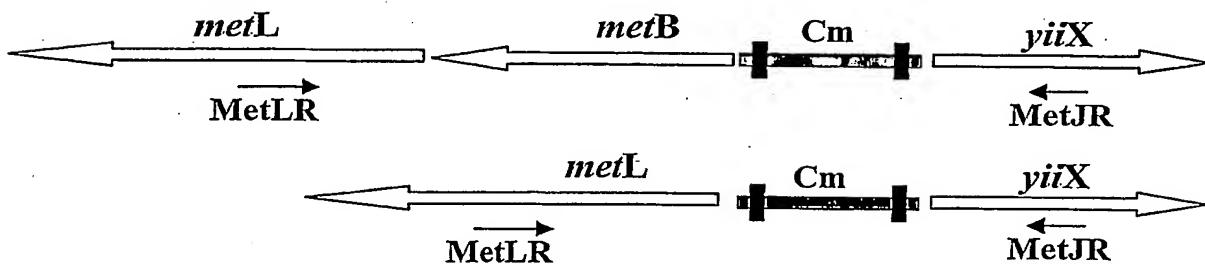
400
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 AN68137 CRVPLRNTG AALSPNENFL ILQGLETLAL RMERHENTAL KVAYHLYQHE QVANVKFAGL PDHPEHALAQ RY-TGCKPAS ILSFGIKGGO AAQARFIDL
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 BAC46370 HLHNFKRQTG PSISPFNAW LLKGLETIAY RVROTDTAA SVAEVLAQGP KISRLJYGR ADHPQAQVYK KOMRGG--ST LVGFEVKGK AAFAFRVNL
 AA057279 -VVGFLRTAG PTISPFNAW FLKGLETIIRI RMRHCANAQ ALAEMLEQOD GIEKVHYAGL ESHPOHELAK RQQRCH--GA VVSFEVKGGK DGAWRFIDT
 AAA83435: PSHPOHELAQ ROQSCF--GA VVSFEVKGGK DAWRFIDT
 NP_284520. -VAVYCNISCG LAMSPNENAWO LLSEGVTLIY RMEQFDNAL KIAQMLQQP QVQAVYITGL PDHPOAELTR KOQNGG--GI VIGFEV-ADQ AAQAKVUDGV
 .v..lr.tg ...SpENaw. .1.Gltt.1 Rme h..na. kvae.L..hp k1..v.%91 .dhpq..1.a. kq..99..g...fenvkgg. aba..fi#.1
 Consensus

Figure 8

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401
 NP_785969 QLFSLLANVA DAKSLIHPA SPTHAQINEQ ELLAGVTPD LIRISVGVEN ADDLIADLQ ALAQV
 NP_712243 ELFSSLANG DAKSLVTHPA STHQQUITPE EQSAGVTPD MVRSGVPRD MVRSGVLEN TEBLDFEE ALKV
 AAN68137 OLVVRUVNIG DAKSLACHPA STTHQLNDD ELEKAGVPRD MVRSGVLEN SDPLIADLQ ALEASRG
 NP_599886:
 BAC46370 KLAKISNLG DAKSLVTHPA TTTHQRLKE DRAGLUSSEG FIRESGLEH ADDLIEDLA ALEKA
 AA057279 RLISITANLG DKKTTTHPS TTSQGRUAPQ ERRAAGTIDS LIRVAVGLED VADLQADLAR GLAAL
 AAA83435:
 NP_284520. RMVSTTNG DKKTTIAHPA TTSQGRUSPE DRAGIGDS LIRVAVGLED LDDIKADMAR GLAAL
 Consensus .L.s.. anlg Daksl..HPa ttth.rl.pe e...aag!... .!rlsvgle. .ddliadL.. ala....

Figure 8 (fin)

**Figure 9****Figure 11****Figure 12**

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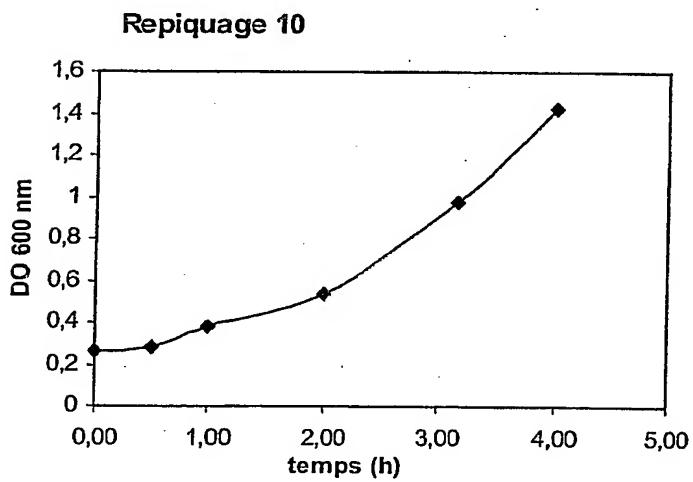
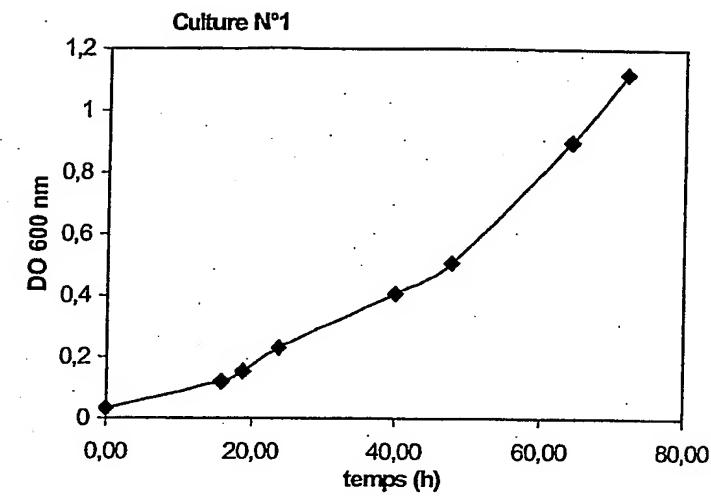


Figure 10

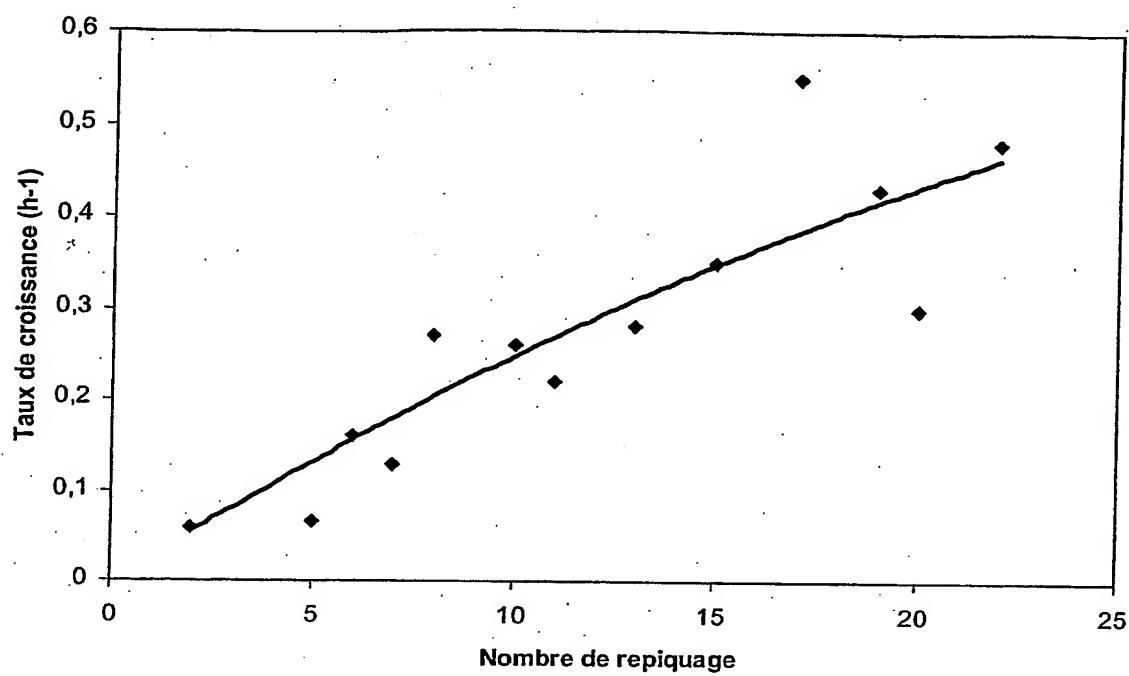


Figure 13

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